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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/535,893	03/27/2000	Fumihisa Shimono	P/29-1252	3965

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EXAMINER

MASKULINSKI, MICHAEL C

ART UNIT	PAPER NUMBER
2113	

DATE MAILED: 08/05/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	09/535,893	SHIMONO, FUMIHISA
Examiner	Art Unit	
Michael C Maskulinski	2113	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 14 July 2004.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-15 is/are pending in the application.
 - 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1,2,6,7,11 and 12 is/are rejected.
- 7) Claim(s) 3-5,8-10 and 13-15 is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: _____

Final Office Action

Claim Rejections - 35 USC § 112

1. In view of the recent amendments, the rejection of claims 1, 6, and 11 under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement has been withdrawn.

Claim Rejections - 35 USC § 102

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

3. Claims 1, 2, 6, 7, 11, and 12 are rejected under 35 U.S.C. 102(e) as being anticipated by Hulyalkar et al., U.S. Patent 6,339,585 B1.

Referring to claims 1, 6, and 11:

- a. In column 4, lines 43-44, Hulyalkar et al. disclose base stations that are in selective wireless connection with one or more wireless terminals (a main unit for communicating with said client terminals).
- b. In column 11, lines 46-67, Hulyalkar et al. disclose that the base station (BS) will begin data transmission to the wireless terminal (WT). Such transmission may include a "ping" message to the WT, which would require the WT to respond. If the WT does not respond, the BS may either immediately assume the WT is down or may repeat the acknowledgment request for a preselected number of times (a first fault detecting unit for detecting a fault on said main unit).

- c. In column 11, lines 58-64, Hulyalkar et al. disclose that once the preselected number of times (which may be set to one (1), by way of example) has been exhausted, the BS would then relay the "ping" message to the WT via the TFN (temporary forwarding node). If the WT responds to the TFN and the TFN does receive the acknowledgment it is determined that the link between the BS and WT is down and the WT will communicate with the BS through the TFN (a disconnection controlling unit for disconnecting said client terminal connected to said access point where said fault was detected by said first fault detecting unit).
- d. In column 4, lines 29-30, Hulyalkar et al. disclose wireless terminals and in Fig. 10, Hulyalkar et al. teach bi-directional communication between the wireless terminals and the base station. Therefore, the wireless terminal has a transceiver unit for communicating with an access point.
- e. In column 13, lines 31-36, Hulyalkar et al. disclose that it is possible to select among multiple TFNs. In this configuration, the WT, when discovering that its link with the BS is down, would preferably determine the best TFN, based for example, on the received energy level from the energized TFNs and the multiple TFN phases received by the WT and generated by each respective TFN (a search controlling unit for searching for another client terminal to which said client terminal disconnected from said access point is to be connected).
- f. In column 12, lines 17-53, Hulyalkar et al. teach a connection controlling unit for connecting said disconnected client terminal to said searched client

terminal by said search controlling unit. Further, in column 8, lines 53-60, Hulyalkar et al. disclose that after synchronization, the WT must “associate” with the network for which it needs an assigned slot. The mechanism to obtain a slot is to send a request for a slot during the E_burst phase. Since the BS/CC is not yet aware of the existence of the WT (independent of the plurality of access points), the BS/CC assigns periodically a certain number of E_burst slots to no particular WT, and here the WT randomly selects one of these unassigned slots to ask for the request of a slot in a succeeding CDF.

Referring to claims 2, 7, and 12, in column 14, lines 7-9, Hulyalkar et al. disclose that the TFN would merely be a conduit for transferring signaling messages between the WT and the CC (wherein each of said client terminals further comprises a repeat controlling unit for controlling communication between said disconnected client terminal and one of said access points connected to said searched client terminal).

Allowable Subject Matter

4. Claims 3-5, 8-10, and 13-15 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

5. Applicant's arguments filed July 14, 2004 have been fully considered but they are not persuasive.

6. On page 9, under the section REMARKS, the Applicant argues, “In contrast, as explicitly recited in Applicant's claim 1, the connection control unit for connecting said

disconnected client terminal to said searched client terminal by said search control unit is done independent of a central controller (the access point) (emphasis by Applicant)."

On Page 9, the Applicant makes a similar argument for claims 6 and 11. The Examiner respectfully disagrees and would like to note that this argument has been thoroughly addressed in the Final Office Action, paper no. 11, mailed November 19, 2003 and the previous Non-Final Office Action. Once again, for the Applicant's convenience, the Examiner will reiterate the argument. In column 12, lines 17-53, Hulyalkar et al. teach a connection controlling unit for connecting said disconnected client terminal to said searched client terminal by said search controlling unit. In column 8, lines 29-37, Hulyalkar et al. disclose that in an adhoc network, there is still the requirement of a central controller to control the signaling/control information and available slot allocation, and it is the data information between the WT (wireless terminal) and the CC (central control) that is distributed such that each WT, during its slot "piggybacks" its control information to the CC, where (among other control) messages it specifies the number of slots requested for the next CDF. Thus, through the CC, the wireless terminal (disconnected client terminal) searches for an empty slot. Further, contrary to the Applicant's belief, the wireless terminal connects to another access point independent of the CC. This is disclosed in column 8, lines 53-60: After synchronization, the WT must "associate" with the network for which it needs an assigned slot. The mechanism to obtain a slot is to send a request for a slot during the E_burst phase. **Since the BS/CC is not yet aware of the existence of the WT** (independent of the plurality of access points), the BS/CC assigns periodically a certain number of E_burst slots to no

particular WT, and here the WT randomly selects one of these unassigned slots to ask for the request of a slot in a succeeding CDF. In other words, BS/CC does not control the connecting. How can the BS/CC control the connecting if it is unaware of the WT?

7. The Examiner would like to note that the section the Applicant relies upon, column 8, lines 29-42, has to be read within the context of the entire reference. The Examiner has considered and even cited this section and still maintains that Hulyalkar et al. teach a connection controlling unit for connecting said disconnected client terminal to said searched client terminal by said search controlling unit independent of the plurality of access points. This is clearly evident in column 8, lines 53-60. The Examiner suggests, in order to expedite prosecution, reading the above arguments and including the allowable subject matter of claims 3-5, 8-10, and 13-15 into the respective independent claims.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael C Maskulinski whose telephone number is (703) 308-6674. The examiner can normally be reached on Monday-Friday 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert W Beausoliel can be reached on (703) 305-9713. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MM


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